IN THE CLAIMS

Claim 1 (previously presented): An optical wavefront modifier for modifying a wavefront of an optical beam passing through the modifier, the modifier comprising a first and a second transparent electrode layer and a medium for modifying the wavefront in dependence on electrical excitation of the medium and arranged between the electrode layers, the first electrode layer comprising three or more electrodes of a transparent, conductive material, characterized in that the first electrode layer comprises a series arrangement of resistors, the electrodes being electrically connected to the series arrangement of resistors and the resistors being made of said transparent, conductive material
wherein the series arrangement of resistors is integrated in the electrodes.

Claim 2 (previously presented): Optical wavefront modifier according to Claim 1, wherein at least the first electrode layer comprises three terminals, which are electrically connected to the series arrangement of resistors.

Claim 3 (original): Optical wavefront modifier according to Claim 1, wherein the electrodes have a configuration for imparting a wavefront modification in Seidel form.

Claim 4 (cancelled)

Claim 5 (previously presented): A device for scanning an optical record carrier having a transparent layer and an information layer, comprising a radiation source for generating a radiation beam, an objective system for converging the radiation beam through the transparent layer to a focus on the information layer, and a detection system for intercepting radiation from the record carrier, characterized in that an optical wavefront modifier according to claim 1 is arranged in the optical path between the radiation source and the detection system.

Claim 6 (previously presented): A device for scanning an optical record carrier having a transparent layer and an information layer, comprising a radiation source for generating a

radiation beam, an objective system for converging the radiation beam through the transparent layer to a focus on the information layer, and a detection system for intercepting radiation from the record carrier, characterized in that an optical wavefront modifier according to claim 2 is arranged in the optical path between the radiation source and the detection system.

Claim 7 (previously presented): A device for scanning an optical record carrier having a transparent layer and an information layer, comprising a radiation source for generating a radiation beam, an objective system for converging the radiation beam through the transparent layer to a focus on the information layer, and a detection system for intercepting radiation from the record carrier, characterized in that an optical wavefront modifier according to claim 3 is arranged in the optical path between the radiation source and the detection system.

Claim 8 (previously presented): A wavefront modifier arranged to receive and modify an incident radiation beam, the modifier comprising:

- at least a first and a second transparent electrode layer, at least the first electrode layer comprising three or more electrodes of a transparent, conductive material, the electrodes defining a first center of symmetry, the first layer being positioned so that the first center of symmetry is displaced from an optical center of the radiation beam in a first displacement direction; and
- at least one medium for modifying the wavefront in dependence on electrical excitation of the medium and arranged between the electrode layers.

Claim 9 (previously presented): The modifier of claim 8 wherein the second layer has a configuration substantially identical to the first electrode layer, and defining a second center of symmetry, said second center of symmetry being displaced from the optical center of the radiation beam according to a second displacement direction, which second displacement direction is different from the first displacement direction.

Claim 10 (previously presented): A device for scanning an optical record carrier having a transparent layer and an information layer, comprising

- a radiation source for generating the radiation beam,
- an objective system lens for converging the radiation beam through the transparent layer to a focus on the information layer, and
- a detection system for intercepting radiation from the record carrier,
- an optical wavefront modifier according to claim 8 arranged in the optical path between the radiation source and the detection system, wherein the first direction of displacement is chosen to compensate for an expected motion of the objective lens system during operation.

Claim 11 (previously presented): A device for scanning an optical record carrier having a transparent layer and an information layer, comprising

- a radiation source for generating the radiation beam,
- an objective lens system for converging the radiation beam through the transparent layer to a focus on the information layer,
- a detection system for intercepting radiation from the record carrier, and
- an optical wavefront modifier according to claim 9 is arranged in the optical path between the radiation source and the detection system, wherein the first and second directions of displacement are chosen to compensate for expected motions of the objective lens system during operation.

12. (previously presented) The device of claim 10, wherein the difference between a first electric signal supplied to the first electrode layer and a second electric signal supplied to the second electrode layer is substantially proportional to a displacement of the objective lens system.

13. (previously presented) The device of claim 11, wherein the difference between a first electric signal supplied to the first electrode layer and a second electric signal supplied to the second electrode layer is substantially proportional to a displacement of the objective lens system.

14. (previously presented) A method for modifying a radiation beam in a scanning device for an optical record carrier, the method comprising:

- using a wavefront modifier comprising
  - at least first and second transparent electrode layers, at least one of the layers having a center of symmetry that is displaced from a center of symmetry of the modifier as a whole;
  - a medium for modifying the wavefront in dependence on electrical excitation from the electrodes;
- adjusting voltage of one or both electrodes to alter an effect of the wavefront modifier to compensate for expected motion of an objective lens system of the scanning device; and
- receiving and modifying a radiation beam using the modifier with the altered effect.

15. (previously presented) An optical wavefront modifier for modifying a wavefront of an optical beam passing through the modifier, the modifier comprising

- at least first and second transparent electrode layers, at least the first electrode layer comprising three or more electrodes of a transparent, conductive material, wherein the electrodes within each layer are arranged around a center of symmetry and a width of the electrodes decreases with increasing radius from the center; and
- at least one medium for modifying the wavefront in dependence on electrical excitation of the medium, the medium being arranged between the electrode layers.

16. (previously presented) The modifier of claim 15, wherein, within at least one of the electrode layers comprises 2N+1 strips numbered consecutively with an index j that runs as -N, -N+1,... , 0, 1 , . . . , N, and the strip with index j covers an area in the (x,y) plane that complies with

$$\frac{2j-1}{2N+1} < W_{31}(x,y) < \frac{2j+1}{2N+1}$$

where $W_{31}(x,y) = (x^2+y^2)x$ is the Seidel polynomial for coma, and x,y are normalized coordinates in the cross-section of the radiation beam in the plane of the compensator, where x is in the direction of displacement of an objective lens system of a device in which the compensator is to be disposed.

17. (previously presented) An optical wavefront modifier for modifying a wavefront of an optical beam passing through the modifier, the modifier comprising

- at least first and second transparent electrode layers, at least the first electrode layer comprising three or more electrodes of a transparent, conductive material, wherein a difference between
    - o a maximum value taken by the aberration function in the area occupied by an electrode and
    - o a minimum value taken by the aberration function in the area occupied by that electrode

  is substantially equal for all electrodes of the wavefront modifier; and
- at least one medium for modifying the wavefront in dependence on electrical excitation of the medium, the medium being arranged between the electrode layers.